

AMENDMENT TO THE CLAIMS

In the claims:

Please amend claims 7-9, 11-13, 16, and 18, cancel claims 6 and 15 and add new claim 20 as follows.

Claims 1-6 (Canceled).

7. (Currently Amended) A pharmaceutical composition ~~as claimed in Claim 6~~ comprising an inhibitor compound which is capable of blocking the interaction of phosphorylase a with the glycogen - targeting subunit (G₁) of protein phosphatase 1, together with a pharmaceutically acceptable exipient or carrier wherein the inhibitor compound comprises a polypeptide having ~~the 16 mer amino acid sequence PEWPSYLGYEKLYPPY, SEQ ID. NO: 1~~ or a fragment ~~or variant~~ thereof which is capable of binding phosphorylase a.

8. (Currently Amended) A pharmaceutical composition as claimed in Claim ~~6~~ 7 wherein the polypeptide consists of a truncated version of the glycogen-targeting subunit of protein phosphatase 1.

9. (Currently Amended) A method of identifying an inhibitor compound which is capable of blocking the interaction of phosphorylase a with the glycogen-targeting subunit of protein phosphatase 1 comprising;
providing a polypeptide comprising ~~the 16 mer amino acid sequence PEWPSYLGYEKLYPPY, SEQ ID. NO: 1~~ or fragment or variant thereof which binds phosphorylase a;

providing a test compound; and

comparing the binding of the polypeptide by phosphorylase a in the presence ~~or~~ and absence of the test compound; an inhibitor being identified by reduced binding of the polypeptide in the presence of the test compound.

10. (Original) A method as claimed in Claim 9 wherein the phosphorylase a is labelled and the binding of phosphorylase a to the polypeptide is determined by measuring the amount of label.

11. (Currently Amended) A method as claimed in Claim 10 wherein

phosphorylase a is labelled with a label selected from ~~digoxigenin and~~ digoxigenin, ³²P or ³³P.

12. (Currently Amended) A compound which is ~~identifiable~~ identified by the method of claim 9.

13. (Currently Amended) A method of reducing the blood glucose level of a mammalian animal comprising administering a therapeutically effective amount of a compound which is capable of blocking the interaction of phosphorylase a with the glycogen-targeting subunit G₁ of protein phosphatase 1, wherein the compound comprises SEQ ID. NO: 1 or a fragment thereof.

14. (Original) A method as claimed in Claim 13 wherein the mammalian animal is a human.

15. (Canceled)

16. (Currently Amended) The method according to claim ~~15~~ 18, wherein the compound is administered to a subject having a disorder associated with higher than normal blood glucose levels.

17. (Original) The method according to claim 16 wherein the disorder is selected from type I or type II diabetes.

18. (Currently Amended) ~~The A method according to claim 15 of~~ blocking the interaction of phosphorylase a with the glycogen-targeting subunit (G₁) of protein phosphatase 1 comprising:
contacting phosphorylase a with a compound in an
amount effective to block the interaction of the
phosphorylase a with the glycogen-targeting subunit (G₁)
of protein phosphatase 1 wherein the compound is a polypeptide comprising SEQ ID NO:1 or a fragment thereof which is capable of binding phosphorylase a.

19. (Previously added) The method according to claim 18

wherein the polypeptide increases the activity of hepatic glycogen synthase.

20. (New) A compound which is capable of blocking the interaction of phosphorylase a with the glycogen - targeting subunit (G_c) of protein phosphatase 1, wherein the compound comprises a polypeptide having SEQ ID. NO: 1 or a fragment thereof which is capable of binding phosphorylase a.